

LINKING VEGETABLE GROWERS TO FIVE-STAR HOTELS – AGRICULTURAL
MARKETING PERSPECTIVE

By

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JAIPUR, RAJASTHAN - 302033

2019

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Report submitted in fulfillment of the requirement for

Research Internship Programme

To

Chaudhary Charan Singh National Institute of Agricultural Marketing,

Jaipur, Rajasthan

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CERTIFICATE

This is to certify that the report entitled, “**LINKING VEGETABLE GROWERS TO FIVE-STAR HOTELS -AGRICULTURAL MARKETING PERSPECTIVE**” submitted in fulfillment of **Research Internship Programme to Chaudhary Charan Singh National Institute of Agricultural Marketing, Jaipur, Rajasthan** is a record of bonafide research work carried out by Ms. **PRIYANKA V** under my supervision and guidance and that no part of the report has been submitted for the award of any other degree, diploma, fellowships or other similar titles or prizes.

Place: Jaipur

Date:

Approved By

ACKNOWLEDGEMENT

This research process would have never come to achievement without the help and encouragement I received from various individuals.

*I feel immense pleasure in placing my deep sense of gratitude and sincere thanks to beloved **Dr. SATISH CHANDRA PANT**, Assistant Professor, CCS National Institute of Agricultural Marketing, for his continued encouragement during the various stages of the research process. I feel extreme happiness to the opportunity conferred upon me to work under his guidance.*

*A special gratitude I gave to **Dr. P CHANDRA SHEKARA**, Director General, NIAM for all his support, motivation, valuable suggestions and guidance.*

*I'm thankful to **Dr. R K MISHRA**, Professor and HOD, Department of Agricultural Economics, OUAT, Bhubaneswar, who informed and guided for this golden opportunity.*

*I would express my heartfelt thanks to **Ms. Shika Verma**, Training Consultant, CCS NIAM, who supports me a lot in all stages. Special thanks for her support and encouragement throughout my research.*

Finally, I am thankful to God, without whose mediation, this opportunity to further my life's goal could not have been realized.

(PRIYANKA V)

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ABSTRACT

LINKING VEGETABLE GROWERS TO FIVE-STAR HOTELS

India has a thriving and well- acclaimed hospitality industry. Food is the most important part of the business. It has to maintain quality and quantity standards. As the phrase “Farm-to-table” speaks, the study is an attempt to channelize farmer to the hotel industry for the betterment of farming community as well as for the hoteliers. On one side hoteliers are serving their clients and feeding number of visitors. On the other hand, they are serving number of farmers indirectly by buying vegetables. People everywhere are looking for a more locally authentic experience, starting with what they eat, leading to an increased scrutiny on the origin and the procurement of their food. The surge can benefit hotels with an opportunity to adjust their menus to provide fresher foods that draw guests and farmers to increase their income and marketing platforms. The study is performed in Karnataka state, For the best results Sheraton and Taj group of hotels and J Venkatapura village of Sidlaghatta Taluk in Chikkballapur District were studied. A sample of 30 farmers were selected randomly, primary data was collected and analysed. As it is evident that the grocery bill of hotels is very high, even though the vegetable growers sell the vegetables at very meagre price. This price gap is due to the many economic reasons, among those intermediaries and quality aspects plays a major role. This price gap can be bridged by linking vegetable growers to five-star hotels which leads to mutual benefit of both the participants. The vegetable growers become economically stable and have a better livelihood as well as the hotels get quantity, quality, and timely availability of vegetables at reasonable prices.

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CHAPTER I

INTRODUCTION

1.1 Vegetable scenario in India.

India is an agrarian country, where more than 50% of population is depend on agriculture for their livelihood. India's diverse climate ensure availability of all varieties of fresh fruits and vegetables. It ranks second in fruit and vegetable production in the world. According to Ministry of Agriculture and Farmer's Welfare 2017-18, India produced 187367 '000 metric tonnes of vegetables. The area under cultivation of fruits stood at 10123 '000 hectares.

India is largest producer of ginger and okra amongst vegetables, ranks second in production of potatoes, onions, cauliflowers, brinjal, cabbages, etc. and third in tomatoes. The vast production base offers India tremendous opportunities for export and different business entities with in country. During 2017-18, India exported vegetables worth Rs. 5181.78 crores and Indian fruits and vegetable market is majorly dominated by vegetables with 65% market share. (Technova research analysis).

1.2 Vegetables Market

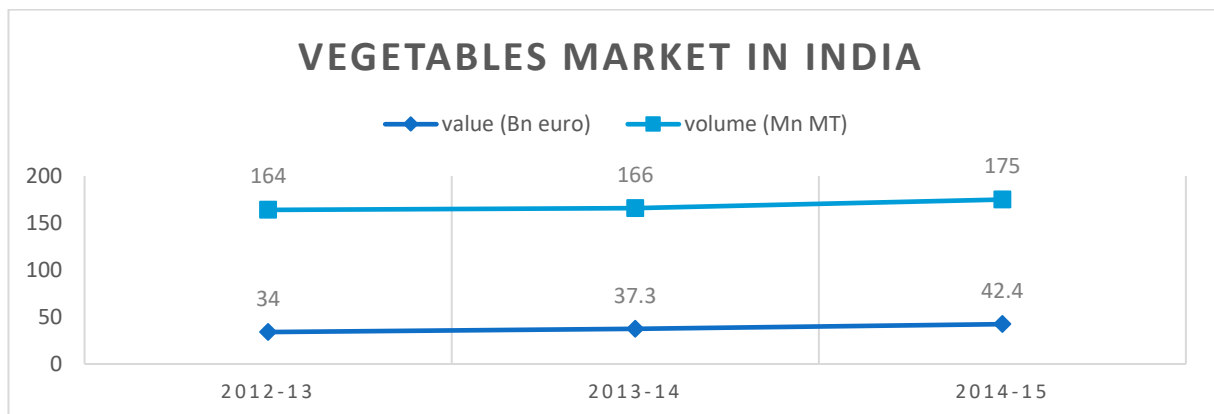


Fig 1.2 Vegetables market in India.

Source: DGFT, technova analysis, Italian Trade Agency.

- Potatoes holds the major share in vegetables market followed by Onions, Tomato and Brinjal.
- These vegetables are consumed on daily basis as a part of meal in India and creating huge demand.

- The five-star and seven-star hotels are also major consumers in India which feeds and shelters for Indian as well as foreign tourists and delegates and creates huge demand for almost all Indian and Exotic vegetables.

1.2.1 Vegetables segmentation – Type and Market volume.

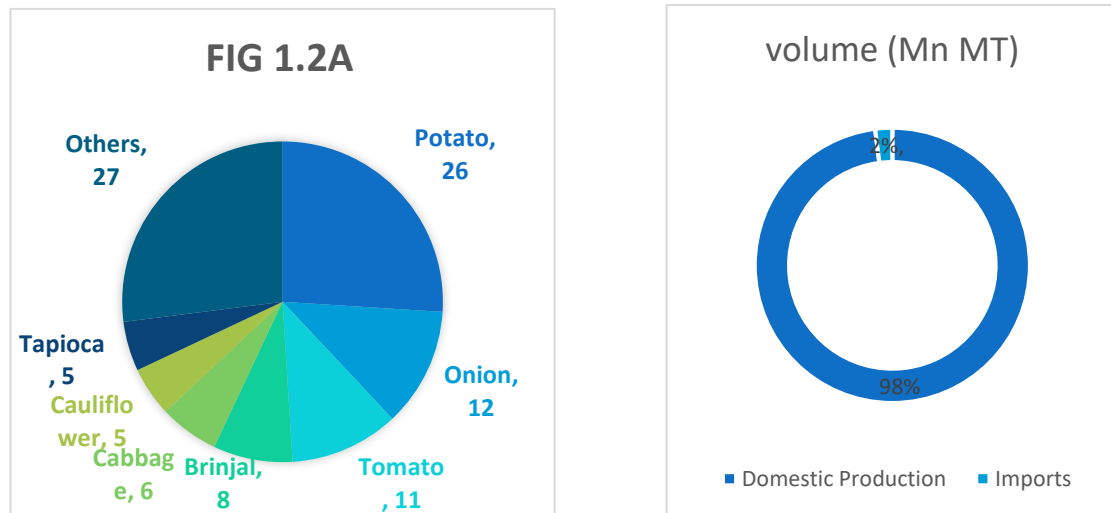


Fig 1.2.1 and Fig 1.2.2 Vegetables segmentation – type and vegetables market volume (Mn MT) in percentage.

Source: Director General for Foreign Trade, Technova analysis (2015).

As in India the growth of Fruits and vegetables is growing rapidly, production has been achieved in a highest scale but still farmers are in the same condition as they were before. They are not getting remunerative prices because of lack of market opportunities. Therefore, need of the hour is to link farmers to the market through various means and ways to earn better livelihood in terms of price realization of their produce.

The 2% of the imports are from Srilanka, Pakistan etc.

1.3 Farmers Producer’s Organization (FPO)

Department of agriculture and cooperation, Ministry of Agriculture, Govt. of India has also identified farmer producer organization (FPO) registered under special provisions of the Companies Act, 1956 as the most appropriate institutional form around which to mobilize farmers and build their capacity to collectively leverage their production and marketing strength.

On to date in Karnataka there are 125 FPO's of which 119 are registered and 6 are under the process of registration (DOACF, GOI).

1.4 Hotel industry

The Indian hospitality industry has emerged as one of the key industries driving the growth of the services sector and, thereby, the Indian economy. The tourism and hospitality sector's direct contribution to GDP in 2016 was US\$ 47 billion (hotel industry research, CARE Ratings 2017). Also, this in India accounts for 7.5% of GDP and is the 3rd largest foreign exchange earner for the country.

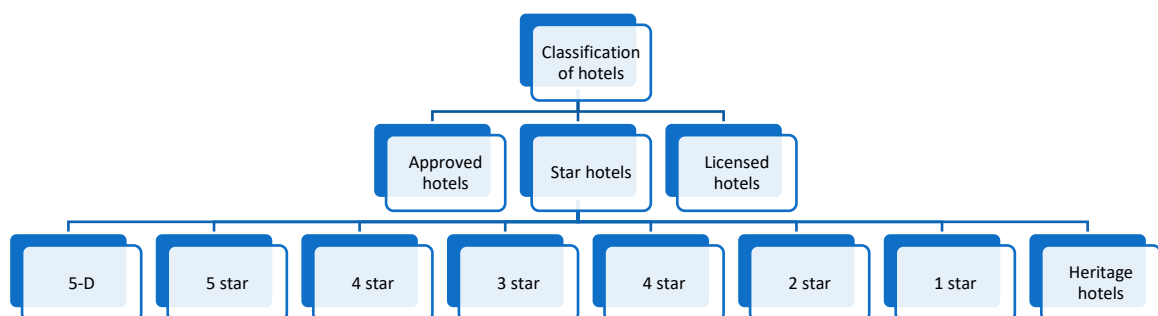
There are 106 five-star alliances in India comprising number of hotels, as India is one of the most popular tourists and faster developing country in the world. These hotels are more interested to serve the better needs of the varied human races. Among them food is the most important part of their business for which they consider many quality and quantity standards to purchase. There is a beautiful quote, "High quality food, every-day of the year", which is also an essential business motto of the hotel management regarding the quality of food they food.

As India comprises of many 5-star alliances with number of branches, a greater number of farmers will get benefitted if they are linked with hotel industry for marketing of their produce.

Hotel classification:

Hotels are classified based on the star rating,

Chart 1.4: Classification of hotels



1.4.1 Revenue and cost structure of five-star hotels in food and beverage:

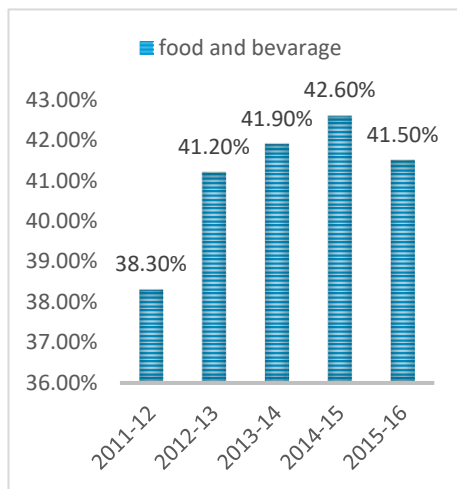


Fig 1.4.1: Revenue structure

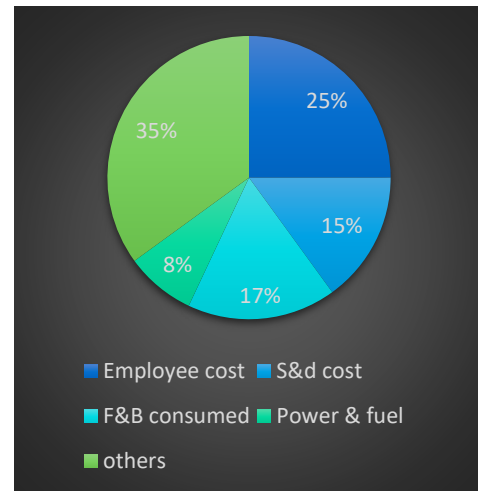


Fig 1.4.2: Cost structure

Source: FHRAI, HVS Research

1.5 Research Problem:

As farmers sell their produce to markets through a long marketing channel. Vendors procure from markets and sell the required quantity of vegetables to the hotels. In this process, the vegetables grown by the farmers in a village ultimately land up in the hotels after going through a number of intermediaries. This results in reduced producer share in the consumer rupee, increased cost of transaction, increased cost structure of the 5-star hotels and decrease the quantity as well as quality of produce.

1.6 Objectives:

Keeping the above problem in mind, the following objectives were taken into consideration for the study:

1. To study the existing Agricultural Marketing practices adopted by farmers in the study area.
2. To identify challenges faced by farmers during sale of produce with respect to price, quality and quantity.
3. To identify the parameters considered while procuring perishables by the hoteliers.
4. To design an appropriate package of marketing practices for linking farmers to the hotels.

1.7 Limitations of the study:

1. The data collected from hotels may be risky because it is not sufficient, reliable and adequate.
2. This survey is restricted to Bangalore city and Chikkaballapur districts.
3. The sample size for the survey of hotels and farmers were limited to 2 and 30 respondents as the study is time bound is research.
4. The results are totally derived from the respondent's answers. There might be difference between actual and projected results.
5. Research also depends on surveyors' bias and his/her ability to analyse the data draw conclusion.

CHAPTER II

RVIEW OF LITERATURE

Hubsch (1996) propounded that dramatic changes have taken place in the hotel industry's attitude toward food and beverage operations in the last ten years. The most significant change in attitude has been that food and beverage has become important as a potential source of new profits.

Amlani (2016), president of NRAI, described that the total food services market today stands at INR 3,09,110 crores and has grown at 7.7% since our last report in 2013. This is projected to grow to INR 4,98,130 crores at a CAGR of 10% by 2021. This year alone, the Indian restaurant sector will create direct employment for 5.8 million people and contribute a whopping INR 22.400 crores by way of taxes to the Indian economy.

Taneja (2008) analyzed to a wholesale dealer of vegetables, two years ago he would sell 50 kilos of foreign vegetables but now he sells anywhere 200 to 300 kg per. He says a big portion of this produce is consumed by hotels. Most hotels these days serve every kind of cuisine. The discerning well-travelled foodie doesn't mind emptying his pocket to pamper his taste buds. The number of diners and those willing to experiment with food as gone up. In Chennai, the increase in the number of corporate clients, foreign delegations, and the IT industry has forced restaurants and hotels to use more exotic vegetables. "We have tandoori cauliflower, but to suit the taste of foreigner guest we now also have tandoori broccoli," the most commonly used exotic vegetables across Indian hotels are broccoli and colourfull bell peppers.

Dhaka and Poonia (2010) studied that vegetable production is constrained by insufficient knowledge about production practices, high incidence of pest and disease, high cost of inputs and poor extension support. Further perishability of vegetable, small quantity of produce and price fluctuation of vegetables are the major impediments in marketing of vegetables.

CHAPTER III

DESCRIPTION OF STUDY AREA

3.1 General particulars of village:

For specified purpose, the performance and current status of Sheraton hotel and Taj Bangalore hotel of Bangalore, Karnataka are selected as target area of research.

For the data collection from vegetable growers, villages under J Venkatapura panchayat was studied. J Venkatapura is a Village in Sidlaghatta Taluk in Chikballapur District of Karnataka State, India. It is located 19 KM towards East from District head-quarters Chikballapur, 70 KM from State capital Bangalore. Along with vegetables growing farmers are widely undergoing Sericulture. As the target village is very near to metropolitan and big cities of state, there was a huge demand for vegetable growers from all the sectors.

Table 3.1: Population details of the village:

Census Parameter	Census Data
Total Population	1918
Total No of Houses	438
Female Population %	49.5 % (950)
Total Literacy rate %	65.8 % (1262)
Female Literacy rate	28.1 % (538)
Scheduled Tribes Population %	1.8 % (34)
Scheduled Caste Population %	25.8 % (494)
Working Population %	44.5 %
Child (0 -6) Population by 2011	192
Girl Child (0 -6) Population % by 2011	49.0% (94)

Source: Gram panchayat RWS Rural Population.

3.2 Area, Production and Productivity of vegetables:

SI No	Vegetable	Area (000 Tonnes)		Production (000Tonnes)		Productivity (Kg/ha)	
		2010-11	2009-10	2010-11	2009-10	2010-11	2009-10
1	Onion	162.3	191.9	1042.3	726.1	6762	3986
2	Potato	40.2	37.1	340.8	308.9	8917	8762
3	Tomato	43.4	36.9	502.6	382.3	11573	10348
4	Brinjal	13.3	12.7	159.3	136.0	11973	10717
5	Beans	7.6	6.3	63.6	48.4	8334	7574
6	Cabbage	6.1	4.7	111.6	80.0	18162	16902

Table 3.2: Vegetables production scenario.

Source: SIP Division, DES.

The table 3.2 description speak that, the production levels in the study area are at the best levels. And this production levels are sufficient enough to meet the demand of the hotel industry in that locality and others.

3.3 General particulars of five-star hotels:

Sheraton and Taj Bangalore hotels are the two well liked, commercially reputed and excellent running business entities owned by Brigade Group and Taj Group of Companies respectively. These two hotels are located at 26/1, Dr Rajkumar Rd, Malleshwaram, Rajajinagar, Bangalore (9591996947) and opp. to International Airport, Bangalore (46160200), Karnataka respectively.

CHAPTER IV

METHODOLOGY

4.1 Research Design:

Descriptive research design is applied to analyse and formulate the existing mechanism in the vegetables marketing between farmers and hotels.

4.1a Data sources:

The study was analysed based on the primary data collected from the farmers, hotels and some government organisations using a set of structured interview schedule.

The secondary data is the results and outcomes of the researches that have done earlier, DGFT reports, FHRAI and Ministry of Agriculture. In addition, various literatures like Books, Journals, Newspapers, Magazines etc. were studied for better results.

4.1b Area of study:

The proposed study is conducted in J Venkatapura post of Chikballapur District and Bangalore of Karnataka State to analyse the existing system of vegetables marketing from farmer to hotels. For the better results, the current prices of vegetables were collected from nearby APMC (Sidlaghatta) and Shandi (Yelahanka Raithu Bazaar).

The analysis was done based on the primary data collected from the 30 local vegetable growers using the prepared structured interview schedule. Multistage random sampling was used in selecting the respondents. The details regarding performance, structure and other crucial details of 5-star hotels was collected from Purchasing Managers of the hotel procurement department. For the better analysis, the current prices of vegetables were collected from the nearby APMC (Sidlaghatta) and Shandi (Yelahanka Raithu Bazaar).

4.2 Sampling Design:

The study is based on both probability and non-probability sampling design for the better assessment of results.

4.2a Sampling Plan:

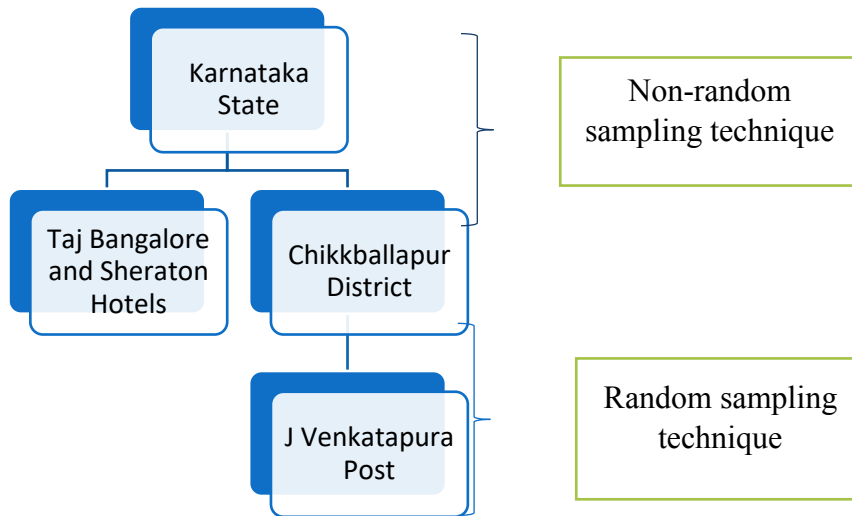


Fig 4.2a.1 Sampling Plan of the study.

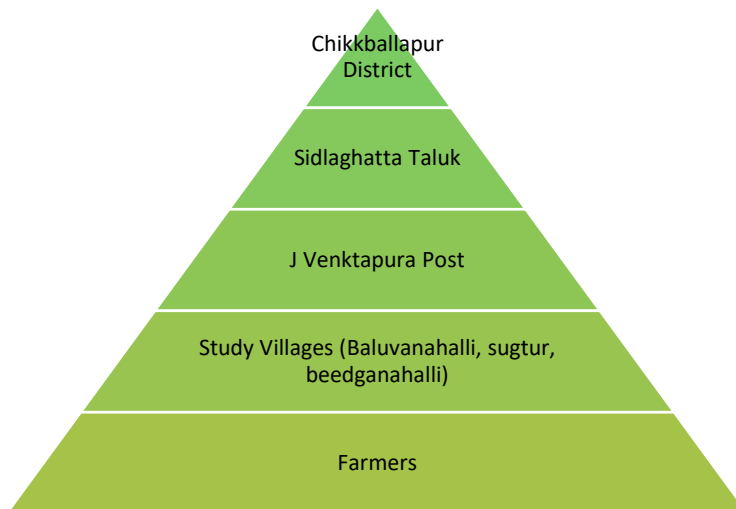


Fig 4.2a.2 sampling plan for data collection from farmers.

The above tables 4.2a.1 and 4.2a.2 are the plan undergone for the data collection of farmers.

4.2b Sampling unit:

SI No	Sampling unit	Number
1	Farmers	30
2	5-star Hotels	2

Table 4.2b Sampling units of the study.

4.2c Research instrument:

The required data was collected from farmers and hotel procurement department (purchase managers) by personal interview method through well prepared structured questionnaires.

4.2d Analytical tools:

Simple statistical tools like tabular analysis and graphical method (through bar graph, pie graph, and line graph by using excel). Weighted averages, mean and percentages were used for analysis of data where ever needed. Henry Garrett's Ranking Technique is used for ranking the marketing problems of farmers.

4.2d.1 Henry Garrett's Ranking Technique:

This technique was used to evaluate the problems faced by the researchers. The orders of merit given by respondents were converted in to rank by using the formula. To find out the most significant factor which influences respondent, Garrett's technique was used. As per this method, respondents have been asked assign ranks for all factors and the outcomes of such ranking have been converted into score value with the help of the following formula:

$$\text{Percent position} = 100(R_{ij}-0.5)/N_j$$

Where, R_{ij} = Rank given for the i th variable by j th respondents

N_j = Number of variables ranked by j th respondents.

For the current analysis, the respondents were asked to rank from 1 to 5 for the problems they are facing in the existing marketing system. Based on the data earned the problems are classified into two different groups and then analysed. The scores are calculated and those scores were manipulated mathematically and each problem has been assigned a rank based on its importance and influence over the vegetable growers.

CHAPTER V

RESULTS AND DISCUSSION

The analysis of the present research as well as relevant discussion have been presented under following heads:

5.1 Agricultural Marketing Practices adopted by Farmers.

The following table shows different areas of marketing where farmers sell their produce of different vegetables.

SI No	Place of marketing	No of farmers	Percentage
1	In door step to local vendor	12	40
2	Weekly market (Shandi, haat etc.)	1	3.333333333
3	In retail shop	0	0
4	In APMC	9	30
5	Local trader's place	4	13.33333333
6	Other (Reliance, marts etc.)	4	13.33333333
	Total	30	100

Table 5.1 Different modes of marketing farmers using to market their produce.

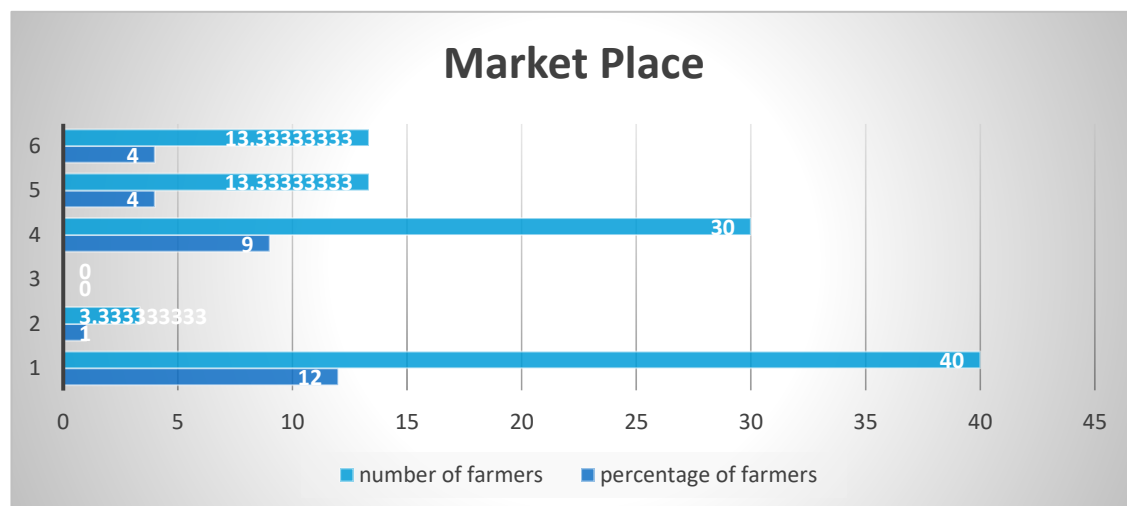


Fig 5.1 Graphical representation of different modes of marketing place farmers using to market their produce.

From the figure, we found that, among 30 farmers 12 farmers are selling their produce to the local vendor at their doorstep. This type of marketing will possess very less

marketing costs but the system reduces the percentage of producers share in consumer's rupee that farmer will get by moving to other channels.

5.1.2 Prices of Tomato, Potato and Cauliflower that farmers got obtained in existing linkage:

The below table gives information about the average prices per kg of tomato, potato and cauliflower that farmers received at different markets.

SI No	Place of marketing	Tomato	Potato	Cauliflower
1	In door step to local vendor	-	20	-
2	Weekly market (Shandi, haat etc.)	-	-	-
3	In retail shop	-	-	-
4	In APMC	18.8	-	6
5	Local trader's place	10	-	-
6	Other (Reliance, marts etc.)	-	15	-
	Total	14.4	17.5	6

Table 5.1.2 average prices of tomato, potato and cauliflower at different markets.

From the table 5.1.2 it is found that farmers confined selling of their produce in only few markets even though there are different ways for marketing of their produce. The reason for farmers to sell their produce in the same market is due lack of time, labour and market awareness.

5.2 Challenges faced by the farmers during marketing of their produce:

The farmers are asked to rank the problems from 1 to 5 in marketing of their produce, according to their scale given problems are divided into major and minor marketing problems. The data collected is analyzed using the Henry Garrett's Ranking Technique.

The division of problems,

SI No	Problems	1	2	3	4	5	Weighted average of the rankings
A	Illiteracy	1	2	5	9	13	46.43
B	Intermediaries	4	11	6	7	2	96.06
C	Weights and scales	2	4	10	8	6	72.2

D	Financial problems	5	12	7	4	2	102.06
E	Lack of organized marketing system	1	18	6	3	2	101.06
F	Lack of transportation facilities	0	5	11	7	7	67.23
G	Standardization and grading	1	6	13	5	5	74.16
H	Lack of market awareness	1	7	8	8	6	69.2
I	Storage facilities	24	3	0	1	2	134.06
J	Price fluctuations	29	1	0	0	0	145.13

Table 5.2 rankings given to different marketing problems by farmers.

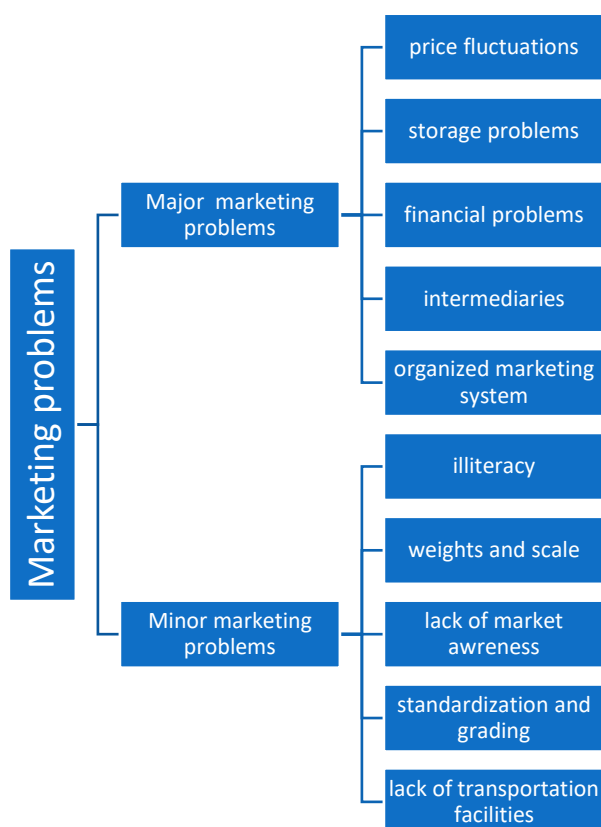


Chart 5.2 depicts the classification of problems into major and minor based on the scaling given by farmers.

5.2.1 Ranking of major problems faced by vegetable growers:

SI No	Problems	Ranks given by respondents				
		1 st	2 nd	3 rd	4 th	5 th
1	Price fluctuations	29	1	0	0	0

2	Storage problems	24	3	0	1	2
3	Financial problems	5	12	7	4	2
4	Intermediaries such as, commission agents etc.	4	11	6	7	2
5	Organized marketing system problem	1	18	6	3	2

Table 5.2.1a: rankings given by the vegetable growers for major marketing problems.

From the above 5.2.1a table, we can understand that 29 respondents ranked 1st for price fluctuations and only 1 ranked as 2nd which notifies how seriously the respondents are affected by this issue. In the same way 24, 5, 4 and 1 and 3, 12, 11 and 18 respondents ranked 1st and 2nd for storage, financial, intermediaries and organized marketing system problems respectively.

Table 5.2.1b Percent position and Garrett's value:

SI No	Percent position $100(R_{ij}-0.5)/N_j$	Calculated value	Garrett's value
1	$100(1-0.5)/5$	10	75
2	$100(2-0.5)/5$	30	60
3	$100(3-0.5)/5$	50	50
4	$100(4-0.5)/5$	70	39
5	$100(5-0.5)/5$	90	24

The Garrett's ranks were calculated by using appropriate Garrett's ranking formula. The Garrett's value is calculated based on the Garrett's ranks. The Garrett's table and scores of problems are listed in above table, and multiplied to records of scores in table 5.2.1a, finally by adding each row, the total Garrett's scores were obtained.

$$\text{Percent position} = 100(R_{ij}-0.5)/N_j.$$

Where, R_{ij} = Rank given for i th variable by j th respondents

N_j = Number of variables ranked by j th respondents.

The following table shows the Garrett's scores and ranks of major marketing problems,

SI No	Problems	Garrett's scores					Average scores	Ranks
		1	2	3	4	5		
1	Price fluctuations	2175	60	0	0	0	35.476	5
2	Storage problems	1800	180	0	39	48	45.933	4
3	Financial problems	375	720	350	156	48	86.789	3
4	Lack of organized marketing system	75	1080	300	117	48	202.5	1
5	Intermediaries	1500	660	300	273	48	185.4	2

Table 5.2.1c: The Garrett's scores and ranks of major problems.

From the above table 5.2.1c, we can identify that lack of organized marketing system is the topmost issue of farmers in marketing as it is ranked first, which can be reduced in direct linkage as the farmers will have definite market system. Intermediaries are the agents who take almost all the producer's share in consumer rupee which can be rectified by linking farmers to hotels as they are directly dealing with the consumers.

5.2.2 Ranking of minor marketing problems using Garrett's Ranking Technique:

SI No	Problems	Ranks given by respondents				
		1 st	2 nd	3 rd	4 th	5 th
1	Weights and scales	2	4	10	8	6
2	Illiteracy	1	2	5	9	13
3	Lack of market awareness	1	7	8	8	6
4	Standardization and grading	1	6	13	5	5
5	Lack of transportation facilities	0	5	11	7	7

Table 5.2.2a: Ranks given by respondents for minor marketing problems

Form the table 5.2.2a, only 2 farmers among 30 ranked weights and scales as 1st and 4 as 2nd. The table identifies that the minor problems are comparatively less affecting the respondents than the major ones as almost all the ranks of problems were in between 3 and 4 which indicates much and not so much of the scale.

Garrett's ranking for the minor problems:

SI No	Problems	Garrett's scores					Average scores	Ranks
		1	2	3	4	5		
1	Weights and scales	150	480	500	156	48	266.8	1
2	Illiteracy	975	540	250	78	24	77.792	2
3	Lack of market awareness	450	480	400	273	24	34.617	4
4	Standardization and grading	375	300	507	234	24	38.919	3
5	Lack of transportation facilities	168	168	550	195	0	29.216	5

Table 5.2.2b: Garrett's scores and ranks of minor problems:

From the table 5.2.2a, it is clear that the respondents facing more problematic in weights and scales among all the minor problems the existing situation which is not a big issue in the direct chain. Illiteracy will become the major issue in the direct linkage if suitable measures not undertaken as it deals with tender and online systems. The market awareness issue will not be much affecting factor if respondents are linked to the direct linkage which deals with tender system, where the details of all the costs, prices etc. will be mentioned.

5.3 Comparison of marketing costs incurred in direct linkage and existing marketing linkage:

- Existing marketing channel of vegetables distribution:

Producers – Commission agent – Wholesaler/Vendor – Hotels.

- Direct linkage to hotels:

Producers – Co-operative societies – Hotels.

The table below compares the costs incurred in both the linkages.

COSTS (Rs/Kg)	EXISTING LINKAGE			DIRECT LINKAGE		
	TOMATO	POTATO	CAULI- FLOWER	TOMATO	POTATO	CAULI- FLOWER
Transportation	1.3	0	0	1.3	1.3	1.3
Loading & unloading	0.6	0	0	0	0	0
Commission agent	10	0	0	0	0	0
Packing charges	0.3	0	0	4.4	0.5	0.6
Quality charges	0	0	0	0.5	0.5	0.5
Total costs	12.2	0	0	6.24	2.3	2.4

Table 5.3. comparison of costs incurred in different linkages.

Note: The costs of marketing in potato and cauliflower in existing linkage is zero because 100% vegetable growers in the survey area selling their produce to contract vendors at their farm-gate.

The analysis part of above table shows that, the per kg marketing costs of direct linkage is more than the existing linkage except tomato such as, per kg costs of tomato, potato and cauliflower are Rs (12.2:6.24), Rs (0:2.3) and Rs (0:2.4) respectively. These higher costs may not affect farmers more because the prices fetched to the prices are far higher than the costs.

5.3.1 Comparison of total costs and profits gained in direct linkage and existing marketing linkage:

Table 5.3.1 total costs and profits of the two linkages.

Vegetables		Tomato	Potato	Cauliflower
Existing Linkage	Total Costs	13.89	1.71	1
	Total Returns	16.3	6	16.6

	Net Returns	2.41	4.29	15.6
Direct Linkage	Total Costs	7.3	3.37	2.76
	Total Returns	33.4	15.25	20.04
	Net Returns	26.1	11.88	17.28
Net Profits to Farmer Per Kg		23.69	7.59	1.68

Note: Net Returns (NR) = Total Returns (TR)-Total Costs (TC).

The table 5.3.1, clearly depicts that the costs are higher in case of direct plan compared to the costs in existing linkage except in tomato. There is huge cost difference of tomato between existing linkage and direct linkage, this is due to high commission and transportation costs in existing linkage. The net returns per kg is much higher in case of direct linkage than existing linkage. The vegetable growers are gaining extra profit of Rs.23.69, Rs.7.59 and Rs.1.68 of tomato, potato and cauliflower vegetables respectively.

From the tables 5.3. and 5.3.1, it is sure that the vegetable growers are highly benefit from the linkage and the linkage leads to increase the level of income and standard of living.

5.4 Parameters adopted by Hoteliers during procurement of vegetables:

According to the survey from the hotel managers the main parameters to be maintained for quality of vegetables by farmers are:

1. Quality: The quality aspect includes many parameters such as size, colour, shape, hygiene and some certification from the government authorities. FSSAI certification is the one of the important parameters the hotels will consider while procurement of the vegetables.
2. Quantity: Assured quantity of produce
3. Availability
4. **Standardization**

The following table gives information about quantity of vegetable in numbers.

SI No	Vegetables	Expected quantity per Kg
1	Tomato	8-10 numbers

2	Potato	6-8 numbers
3	Cauliflower	Only flower (1f=0.5-0.75 kg)
4	Onion	8-10 numbers

Table 5.4.1 Expected quantity of vegetables per Kg.

The table 5.4.1 indicates that per kg of tomato, potato and onion should contain 8-10, 6-8, and 8-10 number respectively. This is the most important parameter that the hotel procurement department want farmers to maintain. Accordingly, the farmer should undergo grading and sorting activities to satisfy the hotel management which the farmers are already adopting in the existing situation.

5.5 Parameters adopted by farmers in the study area:

Level of adoption of Grading and Sorting method by farmers.

SI No	Number of farmers	Percentage
1	23	76.667
2	7	23.333

Table 5.5 level adoption of grading and sorting by farmers.

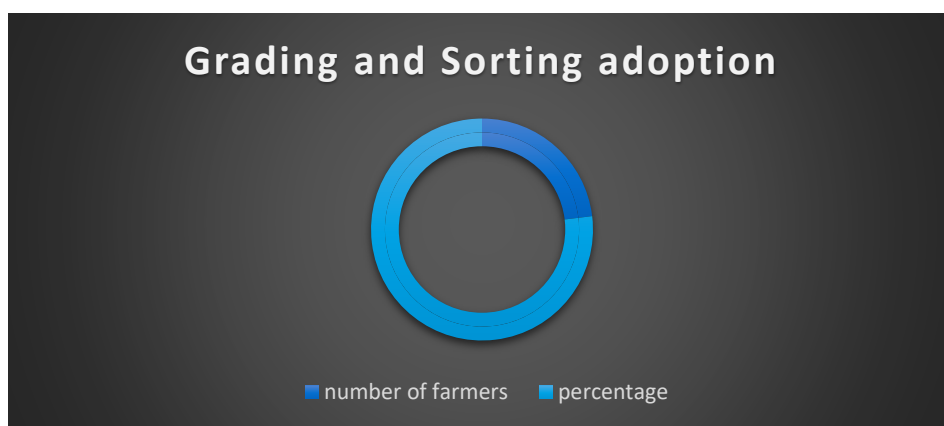


Fig 5.5 Graphical representation of grading and sorting adoption level.

From the table 5.5 it is sure that 76.6% of farmers are undergoing the grading and sorting technique which the hotels are needed, only 23.3% farmers are not undergoing grading and

sorting. This 23.3% is because the farmers are selling their produce at their door step to local vendors.

The following table gives information about the quality aspects that hotel procurement department consider during vegetable procurement,

SI No	Parameters considered by Hotelier	Farmers (yes/no)
1	Grading and sorting	Yes (Majority of farmers are practicing)
2	FSSAI	No
3	Standardization	No
4	Quantity	No

Table 5.5.1 parameters considered by the hotels while procurement and their adoption status by farmers.

In the table Yes indicates farmers adopting the parameters already while No indicates not adopting.

From the table 5.4a, we can say that, farmers already adopting 50% of parameters that the hotels consider for vegetable procurement. Farmers are lacking only in maintaining FSSAI certification and statutory quantity.

5.6 Proposed package of marketing practices designed for direct linkage:

The following design is suggested as an appropriate package of marketing practices,

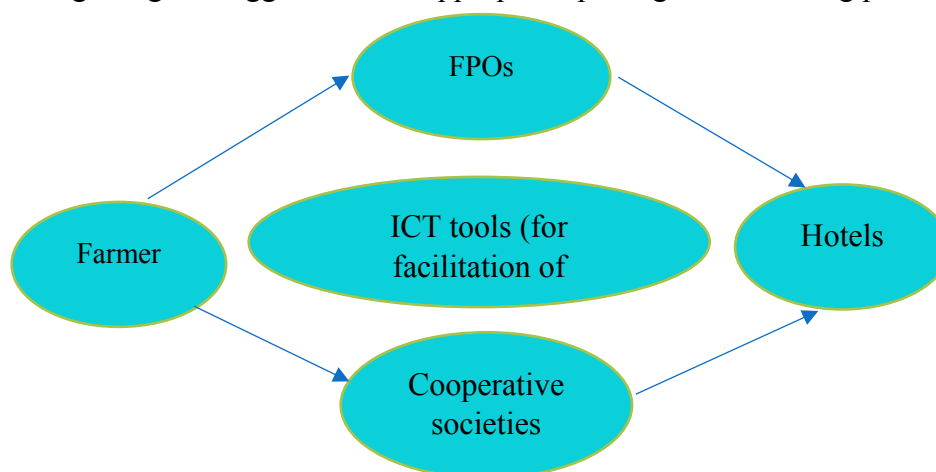


Fig 5.6 Proposed channels of marketing.

The fig 5.6 shows the different channels of marketing of farmers produce that is designed by studying the data.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The analysis of the report shows that price of per kg tomato is Rs.16.3 when farmer sells his produce in the existing marketing channel. And if they are linked directly to the 5-star hotels, they will get the price of Rs.33.4 per kg of tomato, where there is a huge price benefit of Rs.23.69. Similarly, the farmers will get prices of Rs.15.25 and Rs.20.04 which creates an extra benefit of Rs.10.3 and Rs.4.44 per kg of potato and cauliflower respectively.

On the other-side, the total costs per kg of tomato in existing linkage is Rs.13.8 where as it is Rs.7.3 in case of direct linkage. The high costs in existing linkage is due to exhaustive application of fertilizers, transportation and commission costs. There is a huge cost difference of Rs.6.59 per kg of tomato. Long marketing channels and door-step selling of produce are main factors which are reducing producer's share in consumer's rupee. According to the study the same condition exists for almost all the vegetables grown.

The farmers will be bearing extra marketing costs in the direct linkage compared to the existing linkage except tomato as it includes quality management aspect. But according to the primary data from hotel management, the costs will be considered while calculating prices.

The operation of Henry Garrett's Ranking Technique for analyzing the rankings of set of major and minor marketing problems that are faced by farmers during marketing of their produce implies that, the critical problem that the farmers facing are intermediaries and lack of organized marketing system. Both of them are not a serious issue in the proposed linkage as here farmers will be the direct suppliers to hotels. The linkage eradicates the tension of prices from the farmers mindset and as other working people he will also be getting a fixed monthly payment through RTGs/Cheques. Similarly, there are many other major and minor problems which will be get reduced in the proposed system of linkage. But among minor problems one of the most important factor is illiteracy which will become a serious issue if left behind as almost all the operation like tender, payments will be dealing with online system. So, there is a need of preparation of farmer before linking farmers to system.

There will be more chances of getting rejected with the supplied produce from the hotels. The farmers should be more alert in this situation with alternative means of marketing such regrading and sorting of produce and supply it to near-by shandies if the produce not much

destroyed. If the produce is with less quality than he should go for the processing of the vegetable into instant dishes and sell it which will at-least get the costs return.

Suggestions:

The following suggestions may be considered for further research and development based on the above results.

The research clearly indicates that the profits earned by the proposed linkage are much higher than the existing linkage. Therefore, need of the hour is to strengthen the linkage with proper policy implications from state and center government.

As hoteliers demand stringent quality parameters, certifications and standardized packaging which incur a cost to the supplier's end. However, the price realization is far better than other channel and suppliers got ultimate profit at the end of a procurement cycle. This require initial investment which an individual farmer cannot bear hence farmers has to come up with groups and form FPOs or Cooperatives to break the financial burden, to increase marketing opportunities, to increase negotiations power and to enhance other operational capabilities for better linkage and profit. In addition, skill-based training programmes focused on quality, hygiene, certification and linkage process i.e. tendering and payment has to be incorporated through various Govt. and NGOs in the farmer's interest.

During the survey it was observed that farmers were not showing an interest towards the hotel linkage because of lack of guidance and awareness about the innovative market. Hence, the sensitization campaign has to be initiated in collaboration with 5-star hotels.

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ANNEXURE

GARRETT RANKING CONVERSION TABLE

The conversion of orders of merits into units of amount of “soces”

Percent	Score	Percent	Score	Percent	Score
0.09	99	22.32	65	83.31	31
0.20	98	23.88	64	84.56	30
0.32	97	25.48	63	85.75	29
0.45	96	27.15	62	86.89	28
0.61	95	28.86	61	87.96	27
0.78	94	30.61	60	88.97	26
0.97	93	32.42	59	89.94	25
1.18	92	34.25	58	90.83	24
1.42	91	36.15	57	91.67	23
1.68	90	38.06	56	92.45	22
1.96	89	40.01	55	93.19	21
2.28	88	41.97	54	93.86	20
2.69	87	43.97	53	94.49	19
3.01	86	45.97	52	95.08	18
3.43	85	47.98	51	95.62	17
3.89	84	50.00	50	96.11	16
4.38	83	52.02	49	96.57	15
4.92	82	54.03	48	96.99	14
5.51	81	56.03	47	97.37	13
6.14	80	58.03	46	97.72	12
6.81	79	59.99	45	98.04	11
7.55	78	61.94	44	98.32	10
8.33	77	63.85	43	98.58	9
9.17	76	65.75	42	98.82	8
10.06	75	67.48	41	99.03	7
11.03	74	69.39	40	99.22	6
12.04	73	71.14	39	99.39	5
13.11	72	72.85	38	99.55	4
14.25	71	74.52	37	99.68	3
15.44	70	76.12	36	99.80	2
16.69	69	77.68	35	99.91	1
18.01	68	79.17	34	100.00	0
19.39	67	80.61	33		
20.93	66	81.99	32		

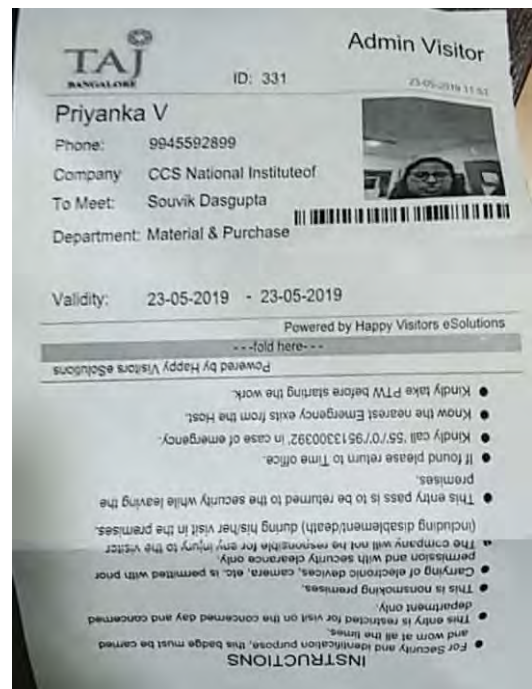
DATA COLLECTION PHOTOS:



HOTEL SHERATON GRAND AND TAJ BANGALORE, BANGALORE.



**VISITOR'S CARD IN SHERATON GRAND,
BANGALORE**



**VISITOR'S CARD IN TAJ
BANGALORE**



CURRENT INDIAN VEGETABLES SUPPLIERS OF TAJ BANGALORE AND SHERATON GRAND HOTELS, BANGALORE.

FARMERS DATA COLLECTION PHOTOS







VISIT TO YELAHANKA RAITHU BAZAAR:



DAILY RATES		DATE: 26-09	
ITEMS	RS - HP	ITEMS	RS - HP
BEANS	70	ELEPHANT YAM	10
BET ROOT	10	ALASANDE KAI	10
BITTER GOURD	10	TROGARI KAI	10
BOTTLE GOURD	10	ONION	10
BENIGAL	10	POTATO	10
CLUSTER BEANS	10	SWEET POTATO	10
BRINJAL WHITE	10	SALAD	10
CARSCORN	10	TOMATO	10
CABBAGE	10	SAMBAK CUCUMBER	10
CARROT	10	SAMBAK ONION	10
CAULI FLOWER	10	LADIES FINGER	10
CUCUMBER	10	KIDNEY GOURD	10
DRUM STICK	10		
KHOL KHOL	10	FRUITS	
BITTER BEANS	10	BANANA VELLAKKI	10
GREEN AVARRE	10	GUAVA	10
GREEN GINGER NEW	10	GRAPES	10
GREEN GINGER OLD	10	CHICKO	10
GREEN CHILLY	10	PAPAYA	10
RED BANANA	10	POWERGRANATE	10
RED BEANS	10		
CHAM GOURD	10		
CHAM CHOW	10		
CHERRIES	10		
GREEN PEAS	10		
GREEN GOURD	10		
BRINJAL	10		
BRINJAL	10		

FARMERS MARKET

DAILY RATES DISPLAY BOARD

PANCHAYATH PHOTOS



Date: _____

Place: _____

QUESTIONNAIRE FOR VEGETABLE GROWERS.

Objective 1: To study the existing Agricultural Marketing practices adopted by farmers in the study area.

Objective 2: To identify challenges faced by farmers during sale of produce with respect to price, quality and quantum.

Name of Respondent: _____

Chief Wage earner in the family and relation with him/he:

I. ADDRESS IN FULL:

Village: _____

Block: _____

Taluk: _____

District: _____

II. SOCIO ECONOMIC STATUS:

EDUCATION LEVEL OF RESPONDENT	CODE
Illiterate	1
Literate but no formal schooling	2
Less than 8 th class	3
SSC/HSC	4
Graduate	5
Post Graduate	6

Family Income (Monthly)	Code
Less than 5000	1
5001 to 10000	2
10001 to 15000	3
15001 to 20000	4
20001 and above	5

Number of family members engaged in farming activity

Landholding size: _____

-

III. PRODUCTION ACTIVITIES:

Q1. Do you grow vegetables?

Yes	1	Continue
No	2	Terminate

Q2. Working profile?

Full time	1
Part time	2

if part time, what are the other work that you do?

a). Agriculture b). Private job c). Government job

Q3. What type of vegetables do you grow?

Tomatoes Capsicum Onion Cucumber

Potato Chillies Other _____ (Specify)

Q4. How long you have been growing vegetables?

SI.NO	VEGETABLES	QUANTITY (kg)
1		
2		
3		
4		
5		
6		

Q9. What are the costs incurred for production of the crop per acre in rupees?

SI.NO	VEGETABLES	COSTS (Rs.)
1		
2		
3		
4		
5		
6		

Q10. Where did you sell your produce?

1. In door step to local vendor
 2. In nearby Shandi or Haat (Weekly Market)
 3. In retail shop
-

4. In APMC Market
5. Local trader's place
6. Other _____(Specify)

Q11: How you sell the produce?

1. Individually
2. Collectively in a small group
3. Collectively In a larger group

Q12. How frequently you sell the vegetables?

1. On daily basis
2. Every alternate day
3. weekly

Q13. How much time you spent during selling of vegetable?

_____Hrs

Q14. Do you follow grading and sorting practice for selling of your produce?

1. Yes
2. No

If yes- State the benefit of grading and sorting

- 1.
- 2.
- 3.

Q15. What are the prices of your produce that you get from market per kg?

Vegetables	Price (Rs/kg)

Q16. How would you rank the problems faced while marketing your produce?

	No Problem	Not so much	Much	Very Much	Severe Problem
Illiteracy	1	2	3	4	5
Intermediates problems (commission agents, traders etc.)	1	2	3	4	5
Weights and scales	1	2	3	4	5
Financial problems	1	2	3	4	5
Lack of organised marketing system	1	2	3	4	5
Lack of transportation	1	2	3	4	5
Standardisation and grading problems	1	2	3	4	5
Lack of awareness of market	1	2	3	4	5

Storage problems	1	2	3	4	5
Any other (_____) _____)	1	2	3	4	5

Q17. Do you grow your vegetables organically?

1. Yes
2. No

If yes- Name the manures used,

- 1.
- 2.
- 3.

If no-What are the alternative fertilisers used?

- 1.
- 2.
- 3.

Q18. Do you undertake any control measures for insect and pest management?

1. Yes
2. No

If yes-State the measure undergone

- 1.
- 2.
- 3.

If no-Why?

Q19. Do you undergo any special agronomic practices for better yields?

1. Yes
 2. No
-

If yes- Mention them,

- 1.
- 2.
- 3.

Q20. What is the soil type of the agricultural land?

Red soil black soil sandy soil clay soil

Q21. Do you undertake any special operations during harvesting to maintain quality of the produce?

1. Yes
2. No

If yes- Mention them,

- 1.
- 2.
- 3.

Q22. Is there any special post-harvest operation do you undertake?

1. Yes
2. No

If yes- Mention them,

- 1.
- 2.
- 3.

IV. SOME OTHER QUESTIONS RELATED TO THE OBJECTIVES:

Q1. Would you like to sell your produce to Five-star hotels?

Yes	1	Continue
No	2	Terminate

Q2. Can you increase your area under cultivation and production of particular crop if the hotels demand?

Yes	1	Continue
No	2	Terminate

Q3. Are you ready to cultivate other crops if demanded by Five-star hotels?

Yes	1	Continue
No	2	Terminate

Q4. Are you ready to swift to other cultural practices if Five-star hotels demanded?

Yes	1	Continue
No	2	Terminate

Q5. Are you ready to maintain all the quality parameters that are asked by Five-star hotels?

Yes	1	Continue
No	2	Terminate

HOTEL INTERVIEW SCHEDULE

Date: _____

I. GENERAL DETAILS:

Name of the hotel: _____

Address Details: _____

Email id: _____

Contact no: _____

Name of the respondent: _____

Respondent position in hotel: _____

II. WORKING DETAILS:

Q1. Did you ever procure vegetables from farmer/local growers? (Mark tick wherever apply)

1. Yes

2. NO

If Yes, a) do you still buy vegetable from farmer/local growers?

1. Yes

2. No

If Yes - i) What are the major vegetables

1. 2. 3. 4

ii) From which area or village?

1. 2. 3. 4.

If No- i) Reasons for discontinuation-

1. _____

2. _____

3. _____

4. _____

5. _____

If No. From where you buy vegetables? List the sources.

1. _____

2. _____
3. _____

Q2. Whether you buy vegetables from same source or different source?

1. Same source
2. Different source

If Same source- State the reasons?

1. _____
2. _____
3. _____
4. _____
5. _____

If different source-State the reasons?

1. _____
2. _____
3. _____
4. _____
5. _____

Q3. What are the vegetables that are being used extensively for preparation?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Q4. Details about vegetable procurement? (*Price of Current Season)

SI.NO	Vegetable	Source of procurement	Quantity/Week or Qt/Month	Price per Kg. *
1				
2				
3				
4				
5				
6				

Q5. While purchasing vegetables what are the parameters you are looking at?

SI. NO	Vegetable	Parameter 1	Parameter 2	Parameter 3	Parameter 4	Parameter 5	Parameter 6
1							
2							
3							
4							
5							
6							

7							
---	--	--	--	--	--	--	--

Q6. How frequent you purchase vegetables

1. Daily basis
2. On Alternate day
3. Twice Weekly
4. Once in a week
5. In a fortnight

Q7. Do you have any storage facility for preserving vegetables?

1. Yes
2. NO

If Yes: For how long you preserve vegetables with you. _____

Q8: Do you get vegetable produce at your doorstep?

1. Yes
2. NO

If No: How far you have to visit for Purchasing (Provide details) _____

Q9. What are the different costs involved in procurement of vegetables?

Sl.NO	Activities	Estimated Cost in Rs.
1		
2		

3		
4		
5		
6		

Q10. What is the purchase policy you have with respect to release of payment?

1. On spot settlement
2. Credit basis

If Credit basis- what is the time for payment _____

Q11. What is the mode of payment?

1. Cash
2. Cheque
3. Other _____ (Specify)

Q12. Do you have any suggestions regarding linking of vegetable growers to five-star hotel?
